

CLAIM(S)

We claim :

5      1.     A process for preparing a nonwoven sheet comprising point bonding the sheet on both sides by passing said sheet between embossing rolls at a combination of bonding temperature, pressure and residence time such that the majority of bond points are not bonded to the point of translucency.

10     2.     The process of claim 1, wherein a cross-sectional area of point bonding on each side of said sheet is from about 10-20% of the sheet area.

15     3.     The process of claim 1, wherein each of said embossing rolls has from 50-80 bosses/cm<sup>2</sup>.

        4.     The process of claim 2, wherein and the cross-sectional area of bonding on each side of said sheet is from about 13-17 % of the sheet area.

20     5.     The process of claim 3, wherein said embossing rolls have from 60-70 bosses/cm<sup>2</sup>.

25     6.     The process of claim 1, wherein the bonding pressure is from about 5-75 kN/m<sup>2</sup> of bonded area.

        7.     The process of claim 1, wherein the residence time of a boss on said sheet is less than 55 milliseconds.

30     8.     A nonwoven sheet material which has been point bonded on both sides of said sheet, wherein the bond points are not bonded to the point of translucency.

35     9.     The nonwoven sheet of claim 8, wherein bond points encompass about 10-20% of the area of each side of the sheet.

10. The nonwoven sheet of claim 8, which is a flash spun film-fibril sheet having a Gurley Hill porosity of less than about 4.5 sec and a hydrostatic head of at least about 100 cm.

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11. The nonwoven sheet of claim 8, having Handle-O-Meter softness of no greater than about 12 grams.

10 12. The nonwoven sheet of claim 8, that has from 50-80 bond points/cm<sup>2</sup> on each side of said sheet.

13. The nonwoven sheet of claim 8, having from 60-70 bond points/cm<sup>2</sup> on each side of said sheet, said bond points on each side of said sheet encompassing about 13-17% of the area of the sheet.

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14. The nonwoven sheet of claim 10, which has a work to break of at least about 5 N-cm.

20 15. The nonwoven sheet of claim 8, having a ribbed point bonding pattern on both sides of the sheet.

16. A nonwoven sheet made by a process comprising point bonding the sheet on both sides by passing said sheet between embossing rolls at a combination of bonding temperature, pressure and residence time such that the majority of bond points are not bonded to the point of translucency.

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17. The nonwoven sheet of claim 16, wherein a cross-sectional area of point bonding on each side of said sheet is from about 10-20% of the sheet area.

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18. The nonwoven sheet of claim 17, which is a flash spun film-fibril sheet having a Gurley Hill porosity of less than about 4.5 sec and a hydrostatic head of at least about 100 cm.

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19. The nonwoven sheet of claim 18, having Handle-O-Meter softness of no greater than about 12.

20. The nonwoven sheet of claim 19, which has a work to break of at least about 5 N-cm.

5 21. A bed linen material made of a nonwoven sheet according to claim 8.

22. An article of protective apparel made of a nonwoven sheet according to claim 8.

10 23. An operating room drape made of a nonwoven sheet according to claim 8.

24. The nonwoven sheet according to claim 8, which has a A.A.T.C.C. Crockmeter surface stability greater than 10 strokes.

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